

# Outbreak of Mumps during Joint Fleet Exercise Aurora

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# Background

- Major fleet exercise late May – early July
- Seven nations
- British Amphibious Task Force
  - Several ships, 6000 Marines and Sailors
- Port-calls/liberty in Virginia and Florida
- Index case 19 May HMS Ocean
  - Approximately 1000 Marines and Sailors
  - Estimated 100 at risk (10% without previous immunization or disease)
- “Cross-decking” common (spread?)
- ATG arrived Norfolk 27 May

# Mumps

## immunization/epidemiology

- Great Britain
  - Only measles vaccine offered prior to 1992
  - Rubella and Mumps added 1994 and 1996 respectively
  - Service members may refuse Force Protection vaccines
  - 10 to 25 percent < 25 yo never vaccinated
  - Public perception of MMR and autism association
  - Annual outbreaks of Mumps in Great Britain
- United States
  - MMR offered since 1977 (Mumps 1967)
  - 93% coverage 19 -35 months of age 2003

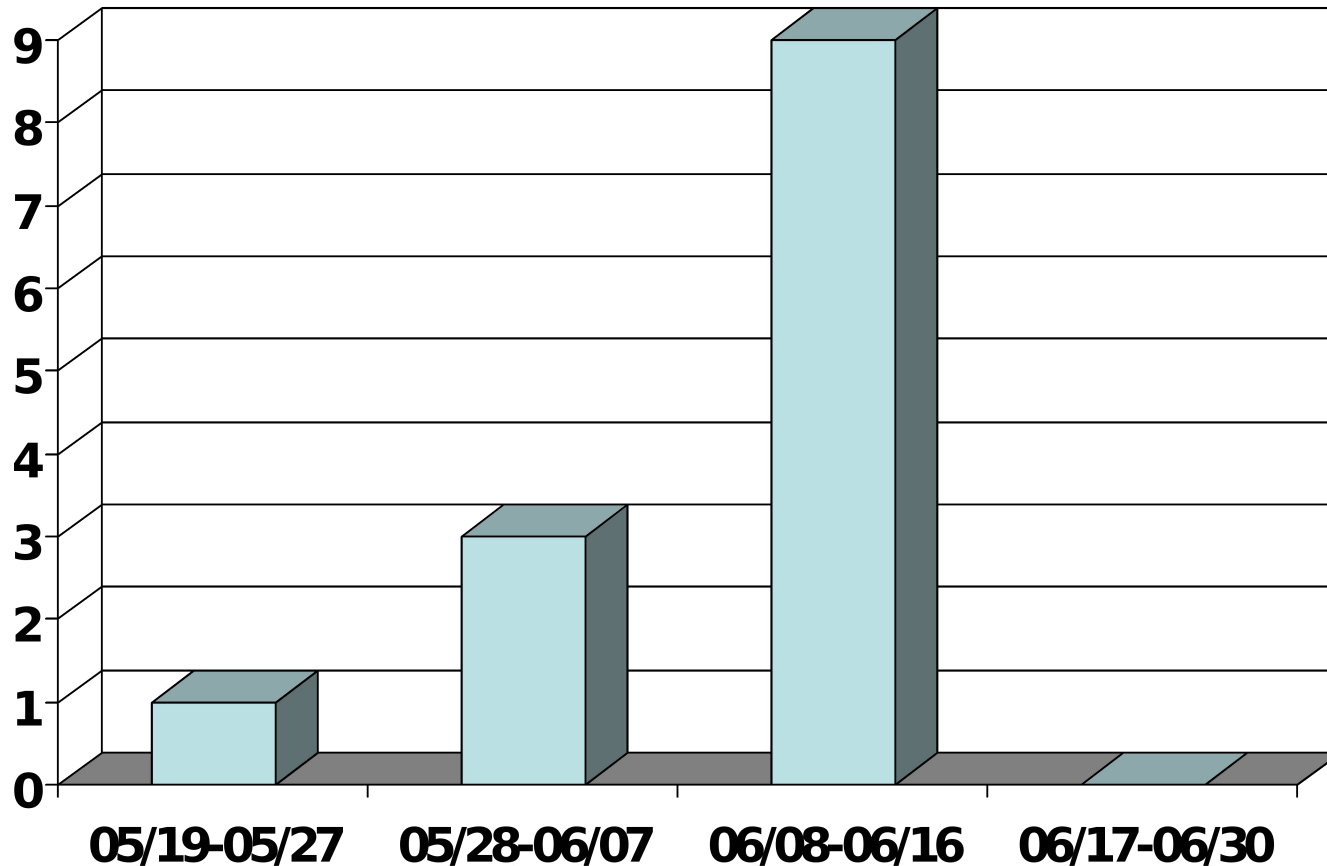
# Outbreak Dynamics

- US Fleet Surgeon arrives HMS Oceana 27 May for courtesy call.
- British fleet sailors/marines prepared for liberty in Norfolk (departure imminent)
- What about our “Mumps”?
- Fleet Surgeon invokes “quarantine” on the spot
- Immediately reports to US Exercise Admiral
  - Initial consternation
  - Later commendation

# Outbreak Dynamics

- Federal Maritime Law, CDC, State Health Department(s), Harbor Master, etc.
- Successful coordination with multiple agencies
  - Vaccination campaign in “At-Risk” ATG personnel 30 May – 3 June (Approx. 600)
    - < 25 yo, no history of vaccination
  - Liberty authorized for those > 25 yo, prior vaccine, or **newly** vaccinated
  - Approximately 50 Marines/Sailors refused vaccine
  - Nine additional cases on HMS Oceana within predicted 10 day incubation period

# Mumps cases HHS Ocean. Estimated at risk population 100.



Mass Vaccination Campaign initiated May 30 - 3  
June

# Joint Allied Operations: Important Considerations

- Different laws concerning vaccine administration/drug prophylaxis
- Allied troops may be subject to epidemics
  - Effect on joint operation?
- Reduced efficacy of herd immunity in US Forces if exposed to infected troops
  - No vaccine with 100% sero-conversion
- Force Health Vaccination policy/procedures should be carefully assessed during planning phase